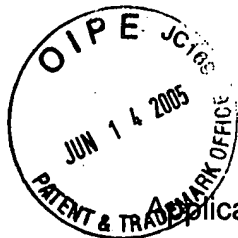


Exhibit 29

Application No. 10/806,775
Amendment dated June 14, 2005



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
PATENT APPLICATION EXAMINING OPERATIONS

Applicant: Hopkins Group Art Unit: 3745
Serial No.: 10/806,775 Examiner: Nguyen, Ninh H.
Filed: March 22, 2004 Docket No: Hunt:FanArr1
Title: Fan Array Fan Section in Air-Handling Systems

AMENDMENT

Law Office of Karen Dana Oster, LLC
PMB 1020
15450 SW Boones Ferry Rd. #9
Lake Oswego, OR 97035
June 14, 2005

Mail Stop RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Please amend the above-identified patent application as follows:

Amendments to the Claims are reflected in the listing of claims that begins on page 2 of this paper.

Remarks/Arguments begin on page 9 of this paper.

CERTIFICATE UNDER 37 CFR 1.10
CERTIFICATE OF MAILING BY
"EXPRESS MAIL"

Express Mail No.: ET836240778US

Date of Deposit: June 14, 2005

I hereby certify that the following documents relating to a Request for Continued Examination for U.S. Utility Patent Application 10/806,775, entitled FAN ARRAY FAN SECTION IN AIR-HANDLING SYSTEMS and invented by Hopkins are being deposited with the United States Postal Service, "Express Mail Post Office to Addressee" service under 37 CFR 1.10, on the date indicated above and is addressed to Mail Stop RCE, Commissioner for Patents, P.O. Box 1450; Alexandria, VA 22313-1450.

- ☒ Request for Continued Examination (RCE) Transmittal Form PTO/SB/30 (in duplicate)
- ☒ Fee Transmittal Form (in duplicate)
- ☒ check for \$ 395 for filing fees
- ☒ Amendment (9 pages)
- ☒ Information Disclosure Statement and Attached ☒ Foreign Reference(s) and ☒ non-Patent reference(s)
- ☒ a return acknowledgement postcard
- ☒ this Certificate of Mailing by Express Mail



Karen Dana Oster

Hunt:FanArr1

Application No. 10/806,775
Amendment dated June 14, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 Claim 1 (previously presented): A fan array fan section in an air-handling
2 system comprising:
3 (a) at least six fan units;
4 (b) said at least six fan units arranged in a fan array;
5 (c) an air-handling compartment within which said fan array of fan units
6 is positioned; and
7 (d) an array controller for controlling said at least six fan units to run at
8 substantially peak efficiency by strategically turning selective ones
9 of said at least six fan units on and off.

10
1 Claim 2 (previously presented): The fan array fan section in an air-
2 handling system of claim 1, wherein said at least six fan units are plenum fans.

3
1 Claim 3 (original): The fan array fan section in an air-handling system of
2 claim 1, wherein said air-handling compartment has an airway path, said airway path
3 being less than 72 inches.

4
1 Claim 4 (previously presented): The fan array fan section in an air-
2 handling system of claim 1, wherein said at least six fan units are a plurality of fan units
3 arranged in a fan array configuration selected from the group consisting of:

- 4 (a) a true array configuration;
5 (b) a spaced pattern array configuration;
6 (c) a checker board array configuration;

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- (d) rows slightly offset array configuration;
- (e) columns slightly offset array configuration; and
- (f) a staggered array configuration.

Claim 5 (previously presented): The fan array fan section in an air-handling system of claim 1, wherein said at least six fan units include at least two vertically arranged fan units.

Claim 6 (previously presented): The fan array fan section in an air-handling system of claim 1, wherein each of said at least six fan units is positioned within a fan unit chamber.

Claim 7 (previously presented): The fan array fan section in an air-handling system of claim 1, wherein each of said at least six fan units is suspended within a respective said fan unit chamber such that there is an air relief passage therebelow.

Claim 8 (previously presented): The fan array fan section in an air-handling system of claim 1, wherein each of said at least six fan units is positioned within a fan unit chamber having at least one acoustically absorptive insulation surface.

Claim 9 (previously presented): The fan array fan section in an air-handling system of claim 1, wherein each of said at least six fan units are mounted in a grid system.

Claim 10 (original): The fan array fan section in an air-handling system of claim 1, wherein each of said at least six fan units has a fan wheel diameter, wherein spacing between said at least six fan units is less than 60% of said fan wheel diameter.

Claim 11 (cancelled):

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2
1 Claim 12 (cancelled):
2

1 Claim 13 (cancelled):
2

1 Claim 14 (cancelled):
2

1 Claim 15 (cancelled):
2

1 Claim 16 (cancelled):
2

1 Claim 17 (cancelled):
2

1 Claim 18 (cancelled):
2

1 Claim 19 (cancelled):
2

1 Claim 20 (cancelled):
2

1 Claim 21 (previously presented): The fan array fan section in an air-
2 handling system of claim 1, further comprising an array of backdraft dampeners, each
3 backdraft dampener in line with a respective fan unit.
4

1 Claim 22 (cancelled):
2

1 Claim 23 (currently amended): The fan array fan section in an air-
2 handling system of claim 1, wherein each fan unit has a peak efficiency operating range
3 outside of which it operates at a reduced efficiency, wherein said array controller is
4 programmed to operate said at least six fan units at substantially peak efficiency by

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5 strategically turning off at least one ~~fan unit~~ fan unit operating at reduced efficiency and
6 running the remaining fan units within said peak efficiency operating range.

1 Claim 24 (cancelled):

1 Claim 25 (previously presented): The fan array fan section in an air-
2 handling system of claim 1, said array controller is programmed to operate said at least
3 six fan units at peak efficiency for a performance level based on a criteria selected from
4 the following group of criteria:

- 5 (a) air volume;
- 6 (b) level of air flow;
- 7 (c) pattern of air flow; and
- 8 (d) number of fan units to operate.

1 Claim 26 (cancelled):

1 Claim 27 (previously presented): The fan array fan section in an air-
2 handling system of claim 1, said array controller is programmed to operate said at least
3 six fan units to produce a stable operating point and eliminate the surge effects.

1 Claim 28 (cancelled):

1 Claim 29 (previously presented): The fan array fan section in an air-
2 handling system of claim 1, said array controller is programmed to selectively control
3 the speed of each of said at least six fan units to run at substantially peak efficiency.

1 Claim 30 (cancelled):

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1 Claim 31 (previously presented): The fan array fan section in an air-
2 handling system of claim 1, said air-handling compartment positionable within a
3 structure such that said air-handling system conditions the air of said structure.
4

1 Claim 32 (new): A fan array fan section in an air-handling system
2 comprising:

- 3 (a) a plurality of independently controllable fan units, each fan unit
4 comprising an inlet cone, a fan, and a motor;
5 (b) said plurality of fan units arranged in a fan array;
6 (c) an air-handling compartment within which said fan array of fan units
7 is positioned; and
8 (d) an array controller for controlling said plurality of fan units to run at
9 substantially peak efficiency by strategically turning selective ones
10 of said plurality of fan units on and off.
11

1 Claim 33 (new): The fan array fan section in an air-handling system of
2 claim 32, wherein said plurality of fan units are plenum fans.
3

1 Claim 34 (new): The fan array fan section in an air-handling system of
2 claim 32, wherein said air-handling compartment has an airway path, said airway path
3 being less than 72 inches.
4

1 Claim 35 (new): The fan array fan section in an air-handling system of
2 claim 32, wherein said plurality of fan units are a plurality of fan units arranged in a fan
3 array configuration selected from the group consisting of:

- 4 (a) a true array configuration;
5 (b) a spaced pattern array configuration;
6 (c) a checker board array configuration;
7 (d) rows slightly offset array configuration;

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8 (e) columns slightly offset array configuration; and

9 (f) a staggered array configuration.

10
1 Claim 36 (new): The fan array fan section in an air-handling system of
2 claim 32, wherein said plurality of fan units include at least two vertically arranged fan
3 units.

4
1 Claim 37 (new): The fan array fan section in an air-handling system of
2 claim 32, wherein each of said plurality of fan units is positioned within a fan unit
3 chamber.

4
1 Claim 38 (new): The fan array fan section in an air-handling system of
2 claim 32, wherein each of said plurality of fan units is suspended within a respective
3 said fan unit chamber such that there is an air relief passage therebelow.

4
1 Claim 39 (new): The fan array fan section in an air-handling system of
2 claim 32, wherein each of said plurality of fan units is positioned within a fan unit
3 chamber having at least one acoustically absorptive insulation surface.

4
1 Claim 40 (new): The fan array fan section in an air-handling system of
2 claim 32, wherein each of said plurality of fan units is mounted in a grid system.

3
1 Claim 41 (new): The fan array fan section in an air-handling system of
2 claim 32, wherein each of said plurality of fan units has a fan wheel diameter, wherein
3 spacing between said plurality of fan units is less than 60% of said fan wheel diameter.

4
1 Claim 42 (new): The fan array fan section in an air-handling system of
2 claim 32, further comprising an array of backdraft dampeners, each backdraft dampener
3 in line with a respective fan unit.

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1 Claim 43 (new): The fan array fan section in an air-handling system of
2 claim 32, wherein each fan unit has a peak efficiency operating range outside of which it
3 operates at a reduced efficiency, wherein said array controller is programmed to
4 operate said plurality of fan units at substantially peak efficiency by strategically turning
5 off at least one fan unit operating at reduced efficiency and running the remaining fan
6 units within said peak efficiency operating range.

7
1 Claim 44 (new): The fan array fan section in an air-handling system of
2 claim 32, said array controller is programmed to operate said plurality of fan units at
3 peak efficiency for a performance level based on a criteria selected from the following
4 group of criteria:

- 5 (a) air volume;
6 (b) level of air flow;
7 (c) pattern of air flow; and
8 (d) number of fan units to operate.
9

1 Claim 45 (new): The fan array fan section in an air-handling system of
2 claim 32, said array controller is programmed to operate said plurality of fan units to
3 produce a stable operating point and eliminate the surge effects.
4

1 Claim 46 (new): The fan array fan section in an air-handling system of
2 claim 32, said array controller is programmed to selectively control the speed of each of
3 said plurality of fan units to run at substantially peak efficiency.
4

1 Claim 47 (new): The fan array fan section in an air-handling system of
2 claim 32, said air-handling compartment positionable within a structure such that said
3 air-handling system conditions the air of said structure.
4

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REMARKS

Claims 1-10, 21, 23, 25, 27, 29, and 31-47 are pending in the application after this amendment. The addition or cancellation of claims is not to be considered in any way an indication of applicant's position on the merits of the added and/or cancelled claims.

Applicant submits herewith an Information Disclosure Statement (IDS) and references of which applicant was recently made aware. Applicant respectfully requests that the references set forth on the IDS be considered and acknowledged. Applicant specifically does not admit that the IDS references are prior art.

Finally, applicant has noted that in the PAIR system there are five (5) entries for March 22, 2004 that are labeled as "APPENDIX TO THE SPECIFICATION." These appendices were submitted as appendices to the Petition to Make Special, not as appendices to the specification.

Please charge Deposit Account No. 50-2115 for any additional fees that may be required.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Karen Oster", is written over a horizontal line.

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Of Attorneys of Record
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